

of the jaw, corresponding to the situation of Professor Owen's sketch of the premolar, Dr. Jackson had made a large and deep excavation, exposing the fangs of the second tooth, removing some of the bone from between them, and opening freely into the dental canal, but without finding any appearance of the tooth which Professor Owen considers as characteristic of the Mastodon. Dr. Hays, also, in his paper upon the "Inferior Maxillary Bones of Mastodons," &c., (Transactions of the American Philosophical Society, Vol. IV. p. 319,) speaks of having examined about forty lower jaws, but says nothing of such a tooth.

Dr. Jackson then alluded, for explanation, to that part of his former Report upon the Cambridge Collection, (Proceedings of the Society, October, 1845,) in which he speaks of six as the true number of the molar teeth in *M. giganteum*, at least in the lower jaw, and in which he inferred, from a statement of Professor Owen, (Annals of Natural History, Vol. XI. p. 330,) that he considered five as the number; the inference was certainly a fair one. He now finds that in the Odontography, which he had not seen when his Report was made, Professor Owen describes seven molars, generally so called, on each side and in each jaw, but with the saving clause above quoted in regard to the lower. Dr. Jackson's observation, then, as to the number of the molar teeth in the lower jaw, corresponds with that of Professor Owen, except for the "small premolar," of the existence of which no proof has yet been given.

Dr. Gould announced that, being employed in the examination of the Shells collected by the United States Exploring Expedition, commanded by Charles Wilkes, U. S. N., he proposed to read before the Society, from time to time, as they might be prepared, descriptions of the new species, in anticipation of their future publication, in a more extended form, and fully illustrated by figures, as one of the volumes of the great work on the Expedition, issued by Congress.

He commenced with the following species of the genus *Chiton*.

CHITON LIGNOSUS. Testa solidula, ovata, tectiformis, cæsia, lineolis fuscis inequalibus subradiantibus marmorata, systemate duplici punctorum majorum et punctorum minorum impressa; valvis planulatis, angulatis, sine rostris; areis lateralibus haud elevatis, vix distinctis; valvâ anteriori parvâ; valvâ posteriori vix umbonatâ: intus æruginosa. Long. $1\frac{1}{2}$, lat. $\frac{7}{8}$ poll. *Hab.* Puget Sound.

Has the form of *C. setiger*, and somewhat the coloring of *C. fulvus*, Wood. It is also allied to *C. tulipa*, Quoy.

CHITON QUERCINUS. Testa depressa, ovalis, vix carinata, quercina, maculis olivaceis nubeculata; valvis subrostratis; areis lateralibus vix elevatis, longitudinaliter sulcatis, sulcis incumbentibus et sulco radiante bisectis; areis centralibus ad latera lineis rugosis longitudinaliter sculptis, ad dorsum punctatis; valvâ anteriori sulcis concentricis et sulcis radiantibus remotioribus decussatâ; valvâ posteriori prope marginem umbonatâ; margine lato, pruinoso, flavescente. Long. $\frac{7}{8}$, lat. $\frac{3}{5}$ poll. *Hab.* New South Wales.

Allied to *C. foveolatus*, Sowerby.

CHITON JUGOSUS. Testa ovalis, carinata, tectiformis, nitida, coloribus pallidè et saturatè herbeis variegata; valvis planulatis, ad apices adunco-acuminatis; areis lateralibus prominentibus, et lineolis confertis parallelis viridibus longitudinaliter notatis; areis centralibus sulcis acutis parallelis longitudinaliter aratis, sed ad verticem simplicibus et minutissimè punctatis; valvâ anteriori concentricè lineolatâ; valvâ posteriori umbonatâ, prope marginem concentricè lineolatâ, præter aream terminalem triangularem luteolam; margine granulato, fasciis cæruleis et viridibus limbato: intus pallidè virescens. Long. 1, lat. $\frac{3}{5}$ poll. *Hab.* New South Wales.

Resembles *C. Siculus*, which, however, has radiating lines on the lateral areas.

CHITON FRUTICOSUS. Testa ovalis, valdè elongata, transversim arcuata, omnino textiliter punctata, olivacea, maculis minutis saturatoribus fulgorantibus variegata; valvis haud rostratis; areis lateralibus prominentibus, et lineis elevatis interruptis ramosis radiatis; areis centralibus lineis longitudinalibus rugosis, ad latera profundis, ad dorsum evanidis et arcuatis sculptis; areâ posteriori magnâ, umbonatâ, lineis inconspicuis, interdum divaricatis, radi-

atâ : intus flavo-olivacea : ligamentum latum, pallidum, minutissimè granulatum. Long. $1\frac{1}{2}$, lat. $\frac{5}{8}$ poll. *Hab.* New South Wales.

Resembles fig. 61 of Sowerby's *Conch. Illustr.*, which is said to be a variety of *C. Indicus*, but which has no ramose sculpture on the lateral areas.

CHITON PLATESSA. Testa parva, tenuis, elongato-ovalis, transversim arcuata, citrino-olivacea, ubique minutissimè punctata; areis lateralibus parvis, vix elevatis, lineis 2-3 inconspicuis striatis; areis centralibus lineis confertis acutis granulatis arcuatim decussatis; valvâ posticâ magnâ, obscurè radiatâ; margine virente, fusco tessellato, minutissimè granulato: intus cæruleo-virescens. Long. $\frac{7}{8}$, lat. $\frac{9}{10}$ poll. *Hab.* New South Wales.

Similar in its general aspect to *C. fruticosus*, but smaller, smoother, and the sculpture of the lateral areas and terminal valves entirely different. It is almost exactly like fig. 67 of the "Conchological Illustrations."

CHITON JASPEDEUS. Testa ovata, tenuis, carinata, ubique minutissimè punctata, coloribus rosaceis plus minusve saturatis picta; areis centralibus lineis minutis granosis confertissimè striatis; areis lateralibus indistinctis, et lineis 3 ad 4 sparsè granosis radiatim notatis; valvis terminalibus granoso-striatis, posticâ excavatâ; margine coriaceo, pruinoso. Long. 1, lat. $\frac{7}{10}$ poll. *Hab.* Callao.

Resembles, in size, shape, and sculpture, *C. apiculatus*, Say; but the sculpture is more delicate, and the color, resembling some varieties of jasper, is quite distinctive.

CHITON PUNICEUS, (COUTHOUY MS.) Testa parva, oblongo-elliptica, elevata, ad dorsum carinata, punctatissima, punicea, gradibus ætatis conspicuis obtusis signata: areis lateralibus præruptè elevatis, et sparsim granulatis; areis centralibus costulis longitudinalibus parallelis ad 6, plerumque ad medium dislocatis, clathratis; valvâ posteriori rostro parvulo acuto et septo transversali notato: ligamentum minutissimè imbricatum, adversum suturas albido fasciatum. Long. $\frac{1}{2}$, lat. $\frac{3}{10}$ poll. *Hab.* Orange Harbor.

Very much resembles *C. ruber*, Lowe.

CHITON CONFOSSUS. Testa parva, ovata, fastigiata, pallida,

roseo et incarnato concinnè variegata; valvis rostratis; areis lateralibus elevatis, serie posticâ squamârum et serie obliquâ squamârum majorum ad apicem spectantium finitis; intervallo lævigato, et granulis paucis annulatis sparso; areis centralibus plerumque lævibus sed punctis sparsis triangularibus retrospectantibus confossis; valvâ posteriori valdè gibbosâ, umbone ferè terminali, dentibus insertionis 9, et ad valvam anteriorem 25, pectinatis: margine fusco, carnoso. Long. $\frac{5}{8}$, lat. $\frac{3}{8}$ poll. *Hab.* Feejee Islands.

Allied to *C. sculptus*, Sowb., which has three lateral rays and the central areas smooth.

CHITON PRUINOSUS. Testa parva, oblongo-elliptica, convexo-elevata, subcarinata, coloribus variis olivaceis, cinereis, et fuscis rubris irrorata et maculata; areis centralibus sub lente omnino quincuncialiter punctatis; areis lateralibus longitudinaliter imbricato-striatis: intus virescens: margo minutissimè granulatus, coloribus fuscis et cinereis tessellatus. Long. $\frac{7}{10}$, lat. $\frac{2}{5}$ poll. *Hab.* Rio Janeiro.

The sculpture of this very variably-colored species is sufficiently characteristic. Between the striæ are usually found minute pores, probably produced by some parasite.

CHITON VIRIDULUS, (COUTHOUY MS.) Testa tenuis, oblongo-ovata, dilutissimè olivacea, ad dorsum sub-carinata, utrinque subcanaliculata, ubique sub lente quincuncialiter insculpta; areis centralibus et lateralibus parum distinctis; lineis incrementi prope marginem conspicuis; valvis terminalibus leviter radiatis: margo minutissimè squamatus. Long. $\frac{3}{5}$, lat. $\frac{2}{5}$ poll. *Hab.* Orange Harbor.

CHITON PETALOIDES. Testa parva, tenuis, ovalis, arcuatim elevata, subcarinata, dilutè citrina; areis lateralibus elevatis, rugosè granulatis, et striis radiantibus ad 4 insculptis; areis centralibus longitudinaliter rugosè granulato-punctatis, et lineolis tenuissimis angulatis dilutè violaceis pictis; valvâ posteriori acutè umbonatâ et costâ transversali divisâ: margo stramineus, minutissimè granulato-imbricatus. Long. $\frac{1}{2}$, lat. $\frac{2}{5}$ poll. *Hab.* Sandwich Islands.

A very beautiful and peculiar shell, its markings resembling the venated petals of some flowers.

CHITON DENTIENS. Testa minima, ovata, carinata, olivacea, ad dorsum albido fulminata, omninò minutissimè granulata; areis vix distinctis; valvis rostratis postice subdenticulatis, dentibus albidis: margo pruinosis. Long. $\frac{1}{5}$, lat. $\frac{3}{20}$ poll. *Hab.* Puget Sound.

Resembles *C. alternatus*, Sowb., which, however, has radiating ribs upon its lateral areas and terminal valves.

CHITON INCANUS. Testa solida, oblongo-ovalis, valdè convexa, cinereo et nigro variegata, concentricè undulato-striata, granulis sparsis nigris aspersa, ad dorsum subcarinata et longitudinaliter nigro bifasciata; areis lateralibus vix distinctis: margo aculeis inequalibus curtis curvatis nigris et canescentibus indutus. Long. $1\frac{3}{10}$, lat. $\frac{3}{4}$ poll. *Hab.* New South Wales.

Like *C. piceus*, Gray, in general appearance, and still more like *C. petholatus*, which has a hairy margin.

CHITON MUSCOSUS. Testa ovalis, depressa, scabra, ad dorsum obtusa, cinereo bifasciata et plumosè striata; valvis magnis, lateraliter disjunctis; areis lateralibus parvis, granulis subquadratis radiantibus arcuatim tessellatis; areis centralibus sulcis acutis confertis flexuosis subparallelis longitudinaliter aratis; valvâ anticâ magnâ, semicirculari, decemcostatâ et granulis subquadratis insculptâ; valvâ posteriori parvâ, costâ transversali inconspicuâ subterminali: margo latus, filis corneis inequalibus muscosis indutus. Long. 2, lat. $1\frac{1}{8}$ poll. *Hab.* Puget Sound.

Allied to *C. brevispinosus*, but its sculpture and margin are quite distinct.

Extracts from a letter from Zadock Thompson were read, announcing the discovery, in the State of Vermont, of *Tryonix ferox* and *Cottus gobio*.

Dr. D. H. Storer exhibited a drawing of *Gasterosteus biaculeatus*, made from a specimen taken at Nahant.

DONATIONS TO THE MUSEUM.

A jaw of *Carcharias obscurus*. From *Dr. D. H. Storer*.

ADDITIONS TO THE LIBRARY.

Thesaurus Conchyliorum. By G. B. Sowerby. Nos. 3 to 6. 8vo. London: 1843 to 1846. *Courtis Fund*.